

Stamina isomorpha; filamenta complanata, 2.4 mm. longa, supra medium geniculata; antherae oblongae, 2.4 mm. longae, 2-loculares, poro lato dehiscentes; connectivo ad basin dilatatum, brevissime productum, et infra thecas in lobos 2 laterales rotundatos deflexum. Ovarium semi-inferum, 3-loculare; stylus glaber, 4 mm. longus, superne incrassatus; stigma vix capitatum.

Type. Cloud-forest, east side of Los Esesmites, Department of Chalatenango, El Salvador, altitude 2300 meters, *Tucker 998* (Herbarium of the University of California no. 693855). The plant resembles *M. purulensis* Donn. Sm. and *M. hemenostigma* Naud. in general aspect, but differs from both in its well developed style and considerably larger flowers.

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## THE INTRODUCTION OF VIOLA LANCEOLATA INTO THE PACIFIC NORTHWEST

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*Viola lanceolata* L. is an abundant and conspicuous plant in several localized marshy areas in western Washington. The unexpected occurrence of this eastern species in this region has prompted much interest. Jones (5) held that it could be adventive here, but that on the basis of ecological evidence this was highly improbable. He thought, rather, that it was a relictual species which had been missed by previous collectors. Baker (2) speculated that seeds of this species had been carried in mud adhering to the feet of migrating water fowl from Venezuela, where it is known to occur. Baird (1) also has commented on the occurrence of this violet in western Washington, but she offered no explanation. Since *V. lanceolata* was previously not known from west of Minnesota, it is little wonder that its occurrence in the Pacific Northwest has invited comment.

Although many of the areas in which *V. lanceolata* now appears to be indigenous were intensively botanized many years ago this species was not collected. For example, Douglas (4) collected for many days near the mouth of the Columbia and on the Long Beach Peninsula in Pacific County, Washington. The writer is personally well acquainted in this area and has been able to locate specific spots in which Douglas collected on the Long Beach Peninsula from 1825 to 1827. Since Douglas collected species of violets and other plants which still grow there, it seems improbable that so keen a collector would have missed *V. lanceolata* if it occurred in the area at that time.

There appears to be a more logical explanation for the occurrence of this violet in the Pacific Northwest. *Viola lanceolata* is a common species in many cranberry (*Vaccinium macrocarpon* Ait.)

bogs in the Atlantic Coast and the Wisconsin cranberry districts. When the cultivated cranberry was first introduced into Washington late in the nineteenth century introductions were on a small scale and were limited to cuttings for propagation. However, from about 1909 to 1916 (3) the cranberry industry in Washington expanded rapidly and made extremely heavy importations of vines for propagation. These came chiefly from the Cape Cod and Wisconsin cranberry areas, in both of which *V. lanceolata* is common. Cranberry vines for propagation were purchased by the ton, and it was a common practice to mow parts of a bog and ship everything, cranberry vines and weeds alike, to the Pacific Coast in order to meet the demand for propagating material. It was undoubtedly in this manner that *V. lanceolata* was introduced into Washington and Oregon.

On the Long Beach Peninsula in southwestern Washington *V. lanceolata* is no longer restricted to the cranberry bogs but is common in low pastures and marshy areas, giving it the appearance of an indigenous species. That this is caused by the annual winter flooding and drainage practices followed in cranberry culture in that area is scarcely open to question. This violet is also a common weed in the cranberry bogs in the Grayland area, adjacent to the ocean near the Pacific County-Grays Harbor County line. Its occurrence at the south end of Puget Sound, where first detected by Jones (5), may be explained in the same manner. There have been periodic attempts to grow cranberries in this area, several bogs being cultivated there at the present time. Its occurrence in several widely separated localities, as noted by Jones, is thus accounted for. This is apparently the first report of its occurrence in Oregon, where the writer has seen it as a common weed in cranberry bogs near Seaside, Clatsop County. No specimens were taken.

*Viola lanceolata* is quite noticeable as a rather small herb with attractive white blossoms in April or May. At that season the plant is too small to be considered a weed of economic importance in cranberry bogs. However, in August and September when at the height of the cleistogamous flowering season, the plants are large and dense with foliage twenty to thirty centimeters high. It is at this season that the cranberries are ripening, and considerable economic loss frequently results from the shading and crowding caused by the dense growth of the violets.

The following specimens of *Viola lanceolata* have been deposited in the Herbarium of the State College of Washington, Pullman: cranberry bog, one mile north of Long Beach, Pacific County, Washington, May 28, 1944, *Schultz 4435* (vernal flowering condition); August 28, 1941, *Schultz 4121* (cleistogamous flowering condition).

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## HERBERT JOHN WEBBER

While gathering oranges in his yard from a tree which he had planted and raised, Dr. Webber suffered a heart attack which was followed by his death on January 18, 1946, shortly after he had reached his eightieth birthday. That his last activity should have been concerned with a fruit which he had studied in one way and another for half a century seems eminently fitting to those who knew him well.

Affable, genial, unselfish, alert, energetic and optimistic, he merited that esteem of colleagues and students which he received. A charter member of the California Botanical Society, he was an enthusiastic and loyal member of the organization. Prominent also in the founding and work of the Botanical Society of America and of the American Genetic Association, his cooperation was freely given to promote welfare of science.

His never-tiring interest in plants endeared him to his teacher, Bessey, at the University of Nebraska, who inspired him with the active scientific spirit which dominated his subsequent life. Webber received the degree of B.S. in 1889 and A.M. in 1890 at the University of Nebraska. He did graduate work at Washington University, obtaining the degree of Ph.D. in 1901. The scientific study of living plants in the out-of-doors became a passion with him when, in 1892, he went to Eustis, Florida, in the service of the United States Department of Agriculture to investigate problems connected with the citrus industry, in association with Walter T. Swingle. At once Webber was fascinated with the new problems in botany in that subtropical region. Writing to Bessey, he waxed enthusiastic about the unique distribution of plants in the hammocks and sandy plains, was excited by the discovery of plants like *Zamia* and *Casuarina*, and the alluring field of citrus culture. In view of his later importance in that field, his remark in a letter to Bessey had singular significance. "Orange studying I find a delight. Hope I may continue to like it as well."

The primitive spermatophyte, *Zamia*, so aroused his scientific curiosity that he somehow found time, aside from his regular